

Title (en)  
MULTI-WAVELENGTH VISIBLE LASER SOURCE

Title (de)  
SICHTBARE LASERQUELLE MIT MEHREREN WELLENLÄNGEN

Title (fr)  
SOURCE LASER VISIBLE À LONGUEURS D'ONDE MULTIPLES

Publication  
**EP 3884663 A4 20230111 (EN)**

Application  
**EP 19886335 A 20191125**

Priority  
• US 201862770892 P 20181123  
• US 2019063112 W 20191125

Abstract (en)  
[origin: WO2020107030A1] Methods and system to provide high power and brightness display and illumination systems and methods. In embodiments multi-wavelength laser beams in the wavelength range of 300 nm to 700 nm, including high power beams in these wavelengths having excellent beam qualities are provided and used. The three wavelengths can be primary colors, red, green and blue. Manufacturing and display systems, allowing the high-power white light generation directly from a single fiber laser source, such as theaters, sporting events, public events, private and home entertainment to name a few. The systems are configured for Photopic and Scotopic vision.

IPC 8 full level  
**H04N 9/31** (2006.01); **H01S 3/108** (2006.01); **H01S 3/30** (2006.01)

CPC (source: EP KR US)  
**H01S 3/005** (2013.01 - KR); **H01S 3/06708** (2013.01 - KR US); **H01S 3/0675** (2013.01 - EP KR US); **H01S 3/094003** (2013.01 - KR); **H01S 3/094046** (2013.01 - EP KR US); **H01S 3/094069** (2013.01 - KR US); **H01S 3/09408** (2013.01 - KR); **H01S 3/09415** (2013.01 - KR); **H01S 3/2391** (2013.01 - US); **H01S 3/302** (2013.01 - EP KR US); **H01S 5/32341** (2013.01 - KR); **H04N 9/3152** (2013.01 - KR); **H04N 9/3158** (2013.01 - EP KR); **H04N 9/3161** (2013.01 - EP KR); **H04N 9/3164** (2013.01 - EP KR); **H01S 3/005** (2013.01 - EP); **H01S 3/094003** (2013.01 - EP US); **H01S 3/094069** (2013.01 - EP); **H01S 3/09408** (2013.01 - EP); **H01S 3/09415** (2013.01 - EP US); **H01S 5/32341** (2013.01 - EP)

Citation (search report)  
• [XYI] US 2004086004 A1 20040506 - BONACCINI DOMENICO [DE], et al  
• [Y] US 9647418 B1 20170509 - HENRY LEANNE J [US], et al  
• [A] US 2016067827 A1 20160310 - ZEDIKER MARK S [US]  
• [XYI] US 2010220294 A1 20100902 - MIZUUCHI KIMINORI [JP], et al  
• [Y] US 2010142564 A1 20100610 - JHANG YAO-WUN [TW], et al  
• [Y] RIBEIRO L A ET AL: "Spontaneous Raman Scattering in Optical Fiber: Experimental Measurement ARTICLES YOU MAY BE INTERESTED IN", AIP CONFERENCE PROCEEDINGS, 1 January 2008 (2008-01-01), XP055943521, Retrieved from the Internet <URL:https://aip.scitation.org/doi/pdf/10.1063/1.3002528> [retrieved on 20220718]  
• See also references of WO 2020107036A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2020107030 A1 20200528**; CA 3120861 A1 20200528; CN 113330737 A 20210831; CN 113330737 B 20240123;  
EP 3884663 A1 20210929; EP 3884663 A4 20230111; JP 2022507927 A 20220118; KR 20210091806 A 20210722; US 11870203 B2 20240109;  
US 2021057865 A1 20210225; WO 2020107036 A1 20200528

DOCDB simple family (application)  
**US 2019062884 W 20191123**; CA 3120861 A 20191125; CN 201980089300 A 20191125; EP 19886335 A 20191125;  
JP 2021529001 A 20191125; KR 20217019248 A 20191125; US 2019063112 W 20191125; US 201916695090 A 20191125